MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2015/2016

EME4216 – QUALITY MANAGEMENT

(All sections / Groups)

1 JUNE 2016
9:00 a.m. – 11:00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

i. This Question paper consists of **2** pages excluding cover page with **4** Questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Question 1.

(a) Any business organization wants to be competitive in the marketplace. In order to be competitive the company has to have optimal organizational resources performance, clear vision and direction, high level of product quality and excellent market response. However, in developing strategic total quality management, there are other vital dimensions that need to be given great attention by the management.

(i) In your own words, **explain** those vital dimensions that need to be focused on in order to promote successful total quality implementation in the organization. [10 marks]

(ii) **Explain** in your own words the important behaviors that an organization must foster in order to establish a quality culture in the organization. [10 marks]

(iii) **Name** the five characteristics of an organization with a strong quality culture. [5 marks]

Question 2.

(a) Assume you have just joined a manufacturing company producing titanium alloy pitch gears. The company has a total of 3 production lines manufacturing 3 different types of gears. It was observed that each production line has on average 5 different types of manufacturing quality defects. Currently, the company is not using any Total Quality Tools to monitor their quality. The production manager asks you to prepare a proposal for the effective usage of total quality tools in the company.

Describe with relevant examples to this company, the usage of the Pareto Chart, Cause-and-Effects Diagram and FMEA in your proposal for the implementation of Total Quality Tools in the company. [8+8+9 marks]

Continued .....

Question 3.

(a) Problem solving is one of the important fundamentals in total quality. It is important that problems are solved effectively and permanently in ways that do not create additional problems. Problems which are not solved may adversely affect costs, customer satisfaction and even lower the organization's competitiveness. The Toyota's Practical Problem-Solving Process has benefited the company over the years. Analyze and **write short notes** on the 7 main steps involved in this renowned process. [16 marks]

(b) The decision making process can be categorized into objective and subjective decision making. Although in many organizations the approach may have both categories, the better goal is to minimize subjectivity and maximize objectivity. Analyze and compare to **explain** the differences between these 2 categories of decision making. [4+5marks]

Question 4.

(a) Continual Improvement should not only be applied to the processes and the people who operate them but also to the products or services that result from the process. There is no single procedure or methodology that can be implemented in improving processes. Evaluate and assess to **describe** each of the listed strategies with relevance to the manufacturing industry.

i. Reduced lead time
ii. Group technology
iii. Reduced setup time
iv. Supplier partners

[8+7+5+5 marks]

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